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3 Hawkins Street Somerville, MA Sustainability Narrative and Strategies



City of Somerville
Green Building Narrative
Preliminary Submission
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Prepared For: Peter Quinn Architects
By: MaGrann Associates and Sustainable Energy Analytics











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Executive Summary

This redevelopment project is submitted for review to the Green Building Department in Somerville, MA by Hawkins Street Union Square LLC for the proposed project at 3 Hawkins Street, Somerville. The team proposed to provide a primarily multifamily residential project with amenity space on the ground floor. The total lot size of the site is 13,951 square feet. The new building will house 59 residential units and a total of 59 bicycle parking spaces on the first floor and 15 car parking spaces at grade.

The project will replace single story commercial space and surface parking to provide needed homes in a high demand, vibrant community. It will provide a convenient, affordable housing alternative for the neighborhood, serving existing residents and those wishing to return to the City of Somerville. The site is conveniently located within walking distance of Union Square, a center of extensive local activity, and will be an extension of the thriving Somerville Ave corridor, known for many community resources such as restaurants, stores, and cultural institutions.

Hawkins Street Union Square LLC is fully committed to the community's green building goals. The current plan will meet the minimum green building requirements of the "Platinum" level (80 pts) with the team working to integrate a more points as the design progresses. The current checklist shows compliance with 83 points for Platinum level compliance, with 14 additional points being evaluated for inclusion. The developer is considering whether to obtain official LEED for Homes certification from the USGBC and ENERGY STAR certifications from the EPA. The original plan to make the building "solar ready" has been abandoned in favor of installing a 2,100 square foot photovoltaic array. Hawkins Street Union Square LLC is intending to build a structure that is energy and water efficient, has minimal impact on the environment, and contributes to a healthy community for the surrounding neighbors and the City of Somerville.

Hawkins Street Union Square LLC has hired Peter Quinn Architects, a Somerville MA-based Architecture and Planning firm to design the project with Sustainable Energy Analytics (SEA) and MaGrann Associates (MA) as the energy conservation and sustainability team to ensure the project meets its sustainability goals.

The following sections will detail the specific green building strategies the team has selected that will be used in the design and construction of this project. Also included is the preliminary LEED for Homes v4 Workbook. The checklist demonstrates that the project, when complete, will meet the LEED Platinum certification level.

Project Description

The Applicant proposes to construct 3 Hawkins Street, a multifamily residential development sited on two adjoining parcels totaling 13,951 sf at 3 Hawkins Street (the "Site"). The site is currently completely covered by surface parking and two single story automotive garages. As listed in the application the project is in the MR5 District.

The Applicant proposes to demolish the existing building and construct fifty-nine (59) residential dwelling units on four (5) levels. The first floor conditioned space will house common amenities of a living room and a fitness room alongside four one-bedroom units. The current plan for the project will provide a variety of unit types: approximately 42% will be studios, 42% will be one bedrooms, 12% will be two bedrooms and 2% will be three bedrooms.

The site is situated a few blocks from Lincoln Park and Walnut Street Park, Perry Park and Concord Square offering access to open space and physical recreation opportunities. Abundant and diverse uses within a half mile will combine with easy access to a high-frequency, well-networked bus service with easy rides to either of the Orange or Green Lines of the T, to facilitate a car-free lifestyle for residents.

The primary entrance for the residential units will be located at the ground floor on Hawkins Street along with a direct secondary entrance from grade level via the walkway on the North side of the building. The secondary access point will connect directly to the bike parking area of the first floor. When combined with the basement, these areas will include fifty-nine (59) long-term secure bike storage spaces. The basement bike storage area offers spaces for tandem and cargo bikes which have proven difficult to store in traditional bike rooms. The first-floor bike parking allows direct access from outside and from the common area of the building. The project provides six (6) short-term spaces along Lake Street. These amenities offer residents who choose bike transit the same or better experience when compared to the expectations of the vehicle driver of the past century.

Sustainability Strategies:

This Building is being designed to meet and exceed the prevailing environmental and energy efficiency standards in force in the City of Somerville and will meet the following standards:

- LEED for Homes v4 "Platinum" Level Certification
- PHIUS+2018
- Massachusetts Stretch Energy Code compliance
- ENERGY STAR Multifamily New Construction v 1.0
- IECC 2015

Hawkins Street Union Square LLC has hired Sustainable Energy Analytics (SEA), and MaGrann Associates (MA) two partner firms centered on sustainability, durability, and energy efficiency to ensure LEED for Homes, Massachusetts Stretch Energy Code, and Utility Program compliance.

This document summarizes the specific LEED for Homes strategies that are being targeted or investigated during the design phase of the project to meet the City of Somerville green building requirements. Also included is the LEED for Homes Workbook's scorecard. According to LEED interpretation 10486, Passive House certified projects may use a 30% better than ASHRAE 90.1 baseline in climate zone 5 as a safe assumption for EA Annual Energy Use. The project team's design decisions have been supported by energy modeling in the WUFI Passive software program aligned with PHIUS.

As required by the City of Somerville the project team is using the LEED for Homes v4 methodology and checklist to quantify the level of green building practices. The city requires that a level of Platinum be attained. A minimum of 80 points must be documented to be considered Platinum as stipulated by Somerville Zoning Ordinance. Based on the preliminary rating the project team is expecting a point total of between 83 to 97 points or 103% to 123% of the target. These targets are preliminary but do reflect the team's holistic and sustainable approach to the design and construction of this building.

Minimum Green Building Requirements

The green building requirements include a set of practices that are mandatory to fulfill the requirements of certification. These requirements earn no points. The verification team from Sustainable Energy Analytics will verify that a plan is in place to meet these requirements by the time construction permits are issued and will verify that these requirements have been met by the project's conclusion (i.e., issuance of certificates of occupancy). There are times when the attainment of these requirements cannot be met by the project conclusion. If this situation arises, the project team will inform the City of Somerville of the issue and provide a plan for compliance for the city to approve.

Mandatory Requirement	Status
Location & Transportation	
a. Floodplain Avoidance	Complete
Sustainable Sites	
b. Construction Activity Pollution Prevention	Documented on Civil Plans
c. No Invasive Plants	By Project Completion
Water Efficiency	
d. Water Metering	By Project Completion
Energy & Atmosphere	
e. Minimum Energy Performance – Simulation	By Permitting
f. Minimum Energy Performance – Verification	By Project Completion
g. Energy Metering	By Project Completion
h. Education of Tenant and Building Manager	By Project Completion
Materials & Resources	
i. Certified Topical Wood	By Project Completion
j. Durability Management	By Project Completion
Indoor Environmental Quality	
k. Ventilation	By Project Completion
I. Combustion Venting	By Project Completion
m. Garage Pollution Prevention	By Project Completion
n. Radon Resistant Construction	By Project Completion
o. Air Filtering	By Project Completion
p. Environmental Tobacco Smoke	By Project Completion
q. Compartmentalization	By Project Completion
Innovation	
r. Preliminary Rating	Complete

Green Measures - Narrative

The following sections detail the specific green measures that will be implemented in this project. All targeted measures will be implemented and verified. Each point would be evaluated on a worst-case basis so the final score would reflect the worst-case scenario.

Integrative Process (IP)

Sustainable design strategies and measures are constantly evolving and improving. New technologies are continually introduced to the marketplace, and up-to-date scientific research influences building design strategies. Occasionally a strategy that has been implemented results in building performance that greatly exceeds that required by code or changes currently accepted building practices. The strategies in this section are being considered to ensure that the project team leverages the knowledge and experience of the entire team and the kinetic creativity that results from team interaction around complex problems. The project team includes a Certified Passive House Consultant, an experienced LEED Green Rater, an experienced HERS Rater, a LEED Accredited Professional and Construction Project Managers practiced in energy-efficient construction techniques. Regular core-design team meetings will be held through the duration of design and construction to ensure that all opportunities to improve building performance are capitalized on, all LEED credit opportunities are met, and all building durability measures are employed. In this project 2 out of 2 possible points are expected.

Targeted Point Strategies:

Integrative Project Team: A team has been assembled with a diverse array of skills. Regular meetings with members of project team will be held to manage the continuity between design and construction of green building measures. Current and upcoming work will be discussed to ensure the design meets all requirements and to identify additional opportunities to cost effectively implement additional measures.

Trades Training: The team plans on expanding the SEA / MA standard practice of approximately 4 hours of project-specific trades training for a construction team to meet the requirements of this credit by providing 8 total hours of trades training. The standard includes an orientation meeting with the full team of Green Rater, HERS Rater, GC, Framing, Electrical, Insulation, Mechanical, and Plumbing subcontractors to review the project's prerequisites and credits as well as the process for on-site verification of those measures. This offers a forum for subcontractors to provide their insight about the project goals and ensure the details are best aligned with the desired outcomes.

Location and Transit (LT)

Location and Transit credits address the site-related environmental impacts, in terms of both the impact to the site itself, the impact of future occupants' travel options and the benefits of avoiding remote sites. The strategies in this section optimally situated sites for minimizing the environmental impact of the building, promoting sustainable land-use and lower carbon transit practices. The project will earn 15 out of a possible 15 points.

Targeted Point Strategies:

Site Selection and Compact Development: Choosing a previously developed, infill site and developing it within an optimal range of density (40-100 units per acre) reduces pressure on the land that surrounds our urban areas. It also requires far less new infrastructure, public or private, to serve the occupants within a fully developed network of utility services, transit and diverse community resources. Furthermore, the street network in Somerville is dense, offering over 110 intersections per square mile in the circle of land within .25 miles of 3 Hawkins Street. This characteristic promotes walkability because walkers can take more direct routes as compared to those with longer block lengths, characteristic of suburban development. Urban planners have long recognized that the efficiency of densely populated areas is important in many dimensions, but that it is also key to provide opportunities for a biophilic experience. Access to parks of sufficient size means that people can reconnect and access the calming rejuvenation of nature without owning a significant piece of it for themselves.

Community Resources: Access to a diverse array of community resources that provide opportunity to complete errands and find entertainment within a short walk will reduce the carbon footprint of the occupants when they opt for these outlets instead of traveling to similar options at a greater distance. It also provides additional eyes-on-the street, helping to make the community safer and more resilient.

Access to Transit: Public transit is by far the most efficient means of moving individuals about a city. Residents only choose it en-masse when service is frequent, safe, affordable and does not take significantly longer than other available means of transportation. With 202 weekday trips and 154 weekend trips available from within a half mile walk, the project earns two points utilizing the v4.1 revised transit ride thresholds for determining points in this credit.

Sustainable Sites (SS)

Thoughtful site design and landscaping decisions can lead to low maintenance landscaping that protects native plant and animal species and contributes to the health of local and regional habitats.

The ways in which a building is, or is not, integrated into the site can have various effects: Rain that falls on a site can be either a detriment, causing soil erosion and runoff of chemicals and pesticides, or a benefit, offering an opportunity to offset potable water demand and recharge underground aquifers. The project is targeting 4 of the available 7 points in SS, with 2 more under consideration.

Targeted Point Strategies:

Construction Activity Pollution Prevention: The builder will follow DPW guidelines to prevent erosion, control runoff, and protect existing watersheds from silt and sediment damage. Erosion control fences will be installed as necessary to either side of the building site to protect the abutting properties from any unusual drainage caused by temporary or unanticipated runoff. New rainwater control systems will be installed and, during construction, protected by filter fabric to ensure that they remained clean.

No Invasive Plants: All newly installed plants will be native to avoid the downside risk of invasive plants escaping into and damaging the local ecosystem, while taking advantage of the selected species capacity to thrive in the local microclimate.

Heat Island Reduction: Over 75% of the total hardscapes on the site will be roofing. High albedo materials, defined as having an SRI of 78 or higher, will be used to reduce heat absorption and mitigate the local urban heat island effect.

Nontoxic Pest Control: Traditional pest control methods often include pesticides detrimental to human health and the natural environment. This building will use a combination of pest control methods that reduce the need for these harmful chemicals. Strategies used will include a solid concrete foundation wall system, a 6-inch visible area of wall space above grade where pest activity can be inspected, diligent sealing of pest entry points in the exterior wall assembly, and pest-proof mesh screens on all openings greater than a ¼ inch (where permitted by code).

Strategies Under Consideration:

Rainwater Management: The project team is evaluating the feasibility of meeting the LEED targets for site permeability and rainwater management. This site is constrained by its available area for rainwater management, but consideration is being given to how the area available can be utilized to reduce the impact on the municipal storm water system through increased onsite infiltration.

Water Efficiency (WE)

Water efficiency measures can easily reduce water usage by 30% or more. In a typical home, savings of 30,000 gallons of water a year can be achieved very cost-effectively. This results in average annual water utility savings of about \$100 per year. On this project the focus is on installing measures that have the highest savings to investment. Of the total 12 available points, the project is targeting 8 points.

Targeted Point Strategies:

Indoor Water Use: All units at 3 Hawkins Street will benefit from high efficiency faucets and fixtures. All fixtures will be WaterSense labeled to ensure not just their water efficiency but also their quality as verified by a government backed, third-party verified label. The lavatory faucets will have an average flow rate of 1 gallon per minute, the showerheads will average 1.75 gallons per minute, and the toilets will average 1.28 gallons per flush. The clothes washer will also be ENERGY STAR certified to ensure it is both water and energy efficient.

Outdoor Water Use: 3 Hawkins Street will use native plants for 100% of its landscaped area. This practice improves the integrity of the local ecosystem while also ensuring that the plants are hearty enough to survive in the local climate without additional watering needs. This practice reduces water consumption significantly as compared to the use of turf which is highly water intensive. This project has no turf on site.

Energy and Atmosphere (EA)

When building green homes, the most important aspect is to minimize the energy use and the associated environmental impacts. For this reason, the EA category has the most available points (37) and offers multiple pathways for compliance. For the 3 Hawkins Street project the Passive House path was chosen. That translates to 29 points toward certification. These points achieved also reflect the smaller size of the units on this project relative to an average size unit. This lower square footage per occupant is a proxy for higher density and reduced consumption per capita. These home size adjustment points reward projects, like 3 Hawkins that can house more people on a smaller material and energy budget and is a calculation that is unique to housing within the LEED rating system.

Targeted Point Strategies:

Minimum Energy Performance: The energy targets modelled for 3 Hawkins Street will be verified on site using the PHIUS Quality Assurance Testing and Verification Protocols (PHIUS T&V). This quality assurance process is critical to ensuring that the designed measures are implemented diligently onsite so that the modeled efficiency gains are achieved once the building is occupied. The PHIUS T&V Protocols include visual verification of 100% of units by a certified PHIUS Rater or Verifier. Final testing and verification are conducted at project completion and may take advantage of the RESNET sampling protocol. Final testing includes whole building envelope leakage compartmentalization, ventilation flow rate and duct leakage tests to validate quality installation and setup.

Annual Energy Use: 3 Hawkins Street will be modelled using a whole building energy simulation to predict its annual energy consumption. As mentioned above, Passive House certified projects are permitted to use 30% better than ASHRAE 90.1-2010 when scoring EA Annual Energy use. A total of 29 out of 30 potential points are there for awarded in this critical energy efficiency category. Efficient Hot Water Distribution, Option 3 Pipe insulation is also intended, a key strategy for minimizing hot water energy waste that is not accurately captured in most energy modeling software programs.

Strategies Under Consideration:

Efficient Hot Water Distribution: This project will use a recirculation pump as part of its hot water distribution system. This pump could include demand activated controls and switches to comply with this credit. At this point the team is intending to optimize the design and test the performance during construction – awarding the appropriate points based on the results.

Materials and Resources (MR)

Good design decisions on the selection, sourcing and installation of materials can significantly reduce demand for materials, as well as their associated waste, embedded energy, and eventual need for replacement. This project focused their efforts on durability and reducing construction waste. The primary culprit of durability concerns in buildings is water intrusion. Proper material selection can reduce the damage caused by water and the need for costly repairs. Out of the maximum 9 points, 4.5 points were earned in this category.

Targeted Point Strategies:

Durability Management & Verification: The ENERGY STAR for Homes program provides a checklist of durability measures that have been provided to the builder on this project to improve their quality assurance onsite. Additionally, a third-party verifier will confirm the items on the checklist and that the drywall installed in wet areas meets ASTM D 3273 standards for durability, water-resistant flooring is used in rooms that may regularly get wet, and proper drainage and exhaust is provided for the water heater, clothes washer and clothes dryer.

Certified Tropical Wood: All wood on this project is non-tropical, reused, reclaimed, or certified by the Forest Stewardship Council. This ensures that any forestry practices in tropical areas that are supported by this project are sustainable and the project's carbon footprint is reduced.

Environmentally Preferable Products: For this project 100% of the aggregate for concrete and foundation will be sourced from a local facility less than 100 miles from the project site. EPP strategies, Low Emission and Local Products will be used throughout this project wherever cost effective. The project team is anticipated gaining 2 credits in this category but will periodically search for cost effective opportunities to achieve more.

Construction Waste Management: Construction Waste Management Planning includes finding local options for diversion and requirement for contractor to provide documentation of actual diversion rate of construction waste. The diversion rate for construction waste will be documented with 2 points anticipated for this credit.

Indoor Environmental Quality (EQ)

Over the past 20 years, research and experience have improved our understanding of what is involved in attaining high indoor environmental quality, revealing manufacturing and construction best practices that can prevent future problems. Preventing problems is generally much less expensive than identifying and solving them after they occur. There are three primary types of strategies used to improve air quality: removal, source control, and dilution. Since the 1987 release of EPA reports that designated indoor air pollution as a top environmental risk to public health, assessing and managing indoor pollutants has become the focus of integrated governmental and private efforts.

The Indoor Environmental Quality category encourages builders to prevent, dilute and filter indoor air pollution to improve air quality and comfort in the homes they build Of the 18 points available the team is targeting 9.5 points with 3.5 additional points under consideration.

Targeted Point Strategies:

Ventilation: A core principle of the PHIUS methodology is balanced ventilation. The local exhaust needs of these homes are met by the extracting side of an ERV, pulling the PHIUS recommended volumes from bathrooms and kitchen areas continuously. The heat and moisture in that outgoing air is exchanged with the incoming fresh air stream, limiting the demand associated with heating or cooling ventilation air. This incoming side of the ERV supplies bedrooms with fresh, tempered outside air at rates that account for the size of the unit and the expected number of occupants. Exhaust and supply will be balanced to prevent the systematic application of either positive or negative pressure to the building envelope. This provides a healthier indoor environment and mitigates the risk encountered when air moves uncontrolled through building assemblies. The bathroom and kitchen exhaust fans and ducts on this project are designed to ASHRAE Standard 62.2-2010.

Combustion Venting: There will be no unvented combustion appliances, carbon monoxide monitor will be installed in each unit, water heating equipment will be sealed combustion or power-vented. Two points are earned by avoiding the sought after but damaging practice of installing a fireplace. No wood, gas, or alcohol fireplaces or stoves are intended within the conditioned space at 3 Hawkins.

Garage Pollutant Protection: To comply with this prerequisite, no air handling units that process air for the conditioned spaces will be present in the fire rated envelope of the garage. The conscientious approach to the air barrier across all parts of the building will continue for the surfaces that separate garage space from conditioned space, preventing infiltration of generally pollution laden air from the garage.

Radon-Resistant Construction: This project is in Radon zone 1 or high-risk area as defined by EPA. In response the design will include all required features of EPA's radon resistant new

construction: a gas permeable layer covered by a control layer of polyethylene, penetrated by airtight PVC piping. These runs will be routed up and through the roof, where an electrical junction box will be located to facilitate the installation of an inline fan should one be needed in the future.

Air Filtering: This project will install air filters with a MERV rating of 8 for recirculating space conditioning systems and a MERV rating of 6 for mechanically supplied outdoor air systems with 10ft or more of ductwork.

Environmental Tobacco Smoke: 3 Hawkins will provide residents an entirely smoke free environment. The team has decided to prohibit smoking in common areas, units or anywhere on the property. Signage will be provided to communicate this policy. These practices satisfy the prerequisite and earn an added point in the associated credit.

Compartmentalization: Multifamily buildings with good air control layers surrounding each unit are more comfortable, efficient and their occupants report greater satisfaction with the space. Compartmentalized units are less likely to share odors, pollutants and sound between units and other units, corridors or outside. The strategies to achieve this are varied and complex, which is part of why this team was assembled to create and execute a plan to perform regarding this requirement.

Enhanced Ventilation: A continuous flow rate makes the most sense when using an ERV to ventilate bathrooms. This qualifies as an enhanced strategy because it will manage any potential humidity build up in bathrooms without requiring specific or proper utilization by occupants.

Contaminant Control: Walk-off mats at exterior entryways will be at least 10 feet long, enough to clean the shoes of entrants without any intentional actions, preventing contamination that would otherwise enter the building and degrade the environmental quality. The builder will flush the air of the building with open windows, HVAC systems on and added fans as needed for at least 48 hours prior to occupancy. These two measures combine to offer one point.

Balancing of Heating and Cooling Distribution Systems: This credit is awarded based on the size of the units. Smaller homes are generally greener, provided they house the same number of people, and in this case can deliver similar levels of balanced comfort to larger homes with multiple zones. Pressure balancing earned by creating adequate free air pathways for air, displaced by supply air to a room to travel back to the return side of the air handling unit, even when the bedroom door is closed.

Enhanced Garage Pollutant Protection: This project does not have a garage which eliminates the risk of pollutants from cars and other toxic materials often stored in garages from entering the home.

Low-Emitting Products: This project is significantly improving indoor air quality by using low-emitting products for its paints, flooring, insulation, adhesives, sealants, and composite wood products.

Innovation (IN)

Green building is a dynamic landscape of new ideas. Concurrent design and construction of thousands of projects with data shared through green building rating systems has accelerated the transition to greener building practices, by allowing project teams a common language to share successes which have become standard practice and failures representing ideas they would be unlikely to repeat in the same manner. Of the total 5 available points, the project is targeting 3 points, with strategies to achieve the other two under consideration.

The Innovation category also offers teams the opportunity to take up to two credits for Exemplary Performance achieved elsewhere in the rating system.

Targeted Point Strategies:

Somerville is an inherently green community based on the existing urban fabric. It is unsurprising then, that 3 Hawkins Street achieved Exemplary Performance for doubling the highest available thresholds in both Community Resources and Access to Transit credits. An additional point is available for the intended HVAC Start up procedure that is aligned with Energy Star Multifamily New Construction and the City of Somerville's commissioning requirements.

Up to two more points could be achieved and are under investigation. Housing Types and Affordability and Design for Accessibility may be met by the design as it evolves. If they aren't met but could be with a modest adjustment to the plans, they may also be pursued.

Regional Priority (RP)

Every location has its own unique environmental challenges. While there are common themes of what can be done to mitigate environmental impact, the issue of how much emphasis to place on each is strongly impacted by the project's location on the Earth. To acknowledge this reality, USGBC created Regional Priority Credits. They then tapped their network of volunteers to identify the zones that define where priorities differ, and which 6 credits are available at which threshold in each zone. If a selected credit is earned at the appropriate level, the project may claim an additional point, up to 4 in Regional Priority. 3 Hawkins will earn the maximum of 4 points in RP.

Targeted Point Strategies:

A regional priority credit will be earned for achieving Access to Transit at 1 point, Heat Island Reduction at 2 points, Non-toxic Pest Control at 2 points, and Annual Energy Use at 15 points.

Appendix A: LEED For Homes Checklist

3 Hawkins St Scorecard

Location: 3 Hawkins St, Somerville, MA 02143, USA

Note: The information on this tab is READ-ONLY. To edit this information, see the Credit Category tabs.



Integrative Process	Preliminary Y 2 of 2 M 0 Verified 0
IPc Integrative Process	2 of 2 0
Location and Transportation	Preliminary Y 15 of 15 M 0 Verified 0



d Transportation	Preliminary	Υ	15 of 15	M	0	Verified	0
Floodplain Avoidance			Required				Not Verified
LEED for Neighborhood Development			0 of 15		0		
Site Selection			8 of 8		0		
Compact Development			3 of 3		0		
Community Resources			2 of 2		0		
Access to Transit			2 of 2		0		
	LEED for Neighborhood Development Site Selection Compact Development Community Resources	Floodplain Avoidance LEED for Neighborhood Development Site Selection Compact Development Community Resources	Floodplain Avoidance LEED for Neighborhood Development Site Selection Compact Development Community Resources	Floodplain Avoidance Required LEED for Neighborhood Development 0 of 15 Site Selection 8 of 8 Compact Development 3 of 3 Community Resources 2 of 2	Floodplain Avoidance Required LEED for Neighborhood Development 0 of 15 Site Selection 8 of 8 Compact Development 3 of 3 Community Resources 2 of 2	Floodplain Avoidance Required	Floodplain Avoidance Required LEED for Neighborhood Development 0 of 15 0 Site Selection 8 of 8 0 Compact Development 3 of 3 0 Community Resources 2 of 2 0



Sustainable	e Sites	Preliminary	Υ	4 of 7	M	3	Verified	0
SSp	Construction Activity Pollution Prevention			Required				Not Verified
SSp	No Invasive Plants			Required				Not Verified
SSc	Heat Island Reduction			2 of 2		0		
SSc	Rainwater Management			0 of 3		3		
SSc	Nontoxic Pest Control			2 of 2		0		



Water Effici	ency	Preliminary	Υ	9 of 12	M	0	Verified	0
WEp	Water Metering			Required				Not Verified
Performance Par	th							
WEc	Total Water Use			0 of 12		0		
Prescriptive Path								
WEc	Indoor Water Use			5 of 6		0		
WEc	Outdoor Water Use			4 of 4		0		



Energy a	nd Atmosphere	Preliminary Y	31 of 37	M 3	Verified	0
EAp	Minimum Energy Performance		Required			Not Verified
EAp	Energy Metering		Required			Not Verified
EAp	Education of the Homeowner, Tenant or Building Manager		Required			Not Verified
EAc	Annual Energy Use		29 of 30	0		
EAc	Efficient Hot Water Distribution System		2 of 5	2		
EAc	Advanced Utility Tracking		0 of 2	1		

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1	7

Materials a	nd Resources	Preliminary	Υ	3.5 of 9	M	3.5	Verified	0
MRp	Certified Tropical Wood			Required				Not Verified
MRp	Durability Management			Required				Not Verified
MRc	Durability Management Verification			1 of 1		0		
MRc	Environmentally Preferable Products			1.5 of 5		2.5		
MRc	Construction Waste Management			1 of 3		1		



Indoor Env	ironmental Quality	Preliminary	Υ	10.5 of 18	M	3.5	Verified	0
EQp	Ventilation			Required				Not Verified
EQp	Combustion Venting			Required				Not Verified
EQp	Garage Pollutant Protection			Required				Not Verified
EQp	Radon-Resistant Construction			Required				Not Verified
EQp	Air Filtering			Required				Not Verified
EQp	Environmental Tobacco Smoke			Required				Not Verified
EQp	Compartmentalization			Required				Not Verified
EQc	Enhanced Ventilation			1 of 3		2		
EQc	Contaminant Control			1 of 2		0		
EQc	Balancing of Heating and Cooling Distribution Systems			2 of 3		0		
EQc	Enhanced Compartmentalization			0 of 3		1		
EQc	Combustion Venting			2 of 2		0		
EQc	Enhanced Garage Pollutant Protection			1 of 1		0		
EQc	Low-Emitting Products			2.5 of 3		0.5		
EQc	No Environmental Tobacco Smoke			1 of 1		0		



Innovation		Preliminary Y	4 of 6	M 1	Verified	0
INp	Preliminary Rating		Required			Not Verified
INc	Innovation		4 of 5	1		
INc	LEED Accredited Professional		0 of 1	0		



Regional P	riority	Preliminary	Y 4 of 4	M 0	Verified 0
DDe	Degianal Drievity		4 of 4	0	

Point Floors			
The project earned at least 8 points total in Location and Transportation and Energy and Atmosphere			No
The project earned at least 3 points in Water Efficiency			No
The project earned at least 3 points in Indoor Environmental Quality			No
Total	Preliminary Y 83 of 110	M 14	Verified 0

Certification Thresholds Certified: 40-49, Silver: 50-59, Gold: 60-79, Platinum: 80-110

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